

Lathyrus grimesii Barneby (1989)**GRIMES VETCHLING**

FAMILY: *Fabaceae*, the legume family.

STATUS:

Heritage Program SENSITIVE LIST, ranks: G2 S2

USFWS/ESA: species of concern. **STATE OF NEVADA:** none. **BLM:** Special Status Species. **USFS:** Humboldt-Toiyabe NF Sensitive Species. **NNNPS:** watch list.

POPULATION CENSUS: 13 occurrences mapped at 1.0 km (0.6 mi) separation, OR 57 occurrences mapped at 0.16 km (0.1 mi) separation; total estimated individuals 1234+, total estimated area 78.1 ha (193 ac). **TREND:** unknown.

IMPACTS AND MAJOR THREATS: Mineral exploration and development, slope destabilization and erosion caused by roads and other disturbances, road maintenance, concentrated trampling by livestock or feral horses, vulnerable to fire hazard and/or competition with invasive weed species, declines in insect pollinator populations.

INVENTORY EFFORT: Exhaustive surveys from the air and on the ground have been completed. Most recent entered survey 1994, average year of last survey 1994. **Years since last entered survey** (percent of mapped records at various survey ages): **6-10 yrs:** 100%.

LAND MANAGEMENT in decreasing predominance: Humboldt-Toiyabe National Forest, private lands, U. S. Bureau of Land Management.

RANGE: Elko County, Nevada. Nearly endemic to the northern Independence Range, with one disjunct site in the southern Bull Run Mountains. Maximum **range dimension 14.9 km (9.3 mi)** excluding most disjunct record. **Type specimen** collected in Elko County.

ELEVATIONS RECORDED: 6080-8360 feet (1853-2548 meters).

HABITAT: Dry, open, shallow, silty clay soils usually overlain by a thin scree of reddish to yellowish brown gravel floated from an underlying cherty or partly quartzitized mudstone component of the Schoonover Formation, forming relatively barren patches on mostly steep slopes of all aspects, and supporting a sparse to moderately dense vegetation usually dominated by *Lathyrus grimesii* in association with *Purshia tridentata*, *Ericameria nauseosa*, *Artemisia tridentata* vaseyana, *Leymus cinereus*, *Bromus tectorum*, and occasionally *Euphorbia esula* and *Trifolium leibergii*. *Lathyrus grimesii* colonies form dense patches that turn a uniform bright yellowish-tan during and after fruit maturation, rendering them highly visible on the landscape.

PHENOLOGY: flowering late-spring. Range of most frequent **survey months:** June-August.

LIFE-FORM AND HABIT: rhizomatous perennial herb.

DESCRIPTION: A low perennial herb with decumbent stems that reach about 1-2.5 dm in height. Produces large, purple and white, bicolored flowers in June and July.

PHOTOGRAPHS: Morefield (1996), Smith and Curto (1995); Nevada Natural Heritage Program images web page (1998-present), slide collection (1986-present), and files.

ILLUSTRATIONS: Barneby (1989).

SPECIFIC REFERENCES:

Bair, J. 1995. Endangered and threatened wildlife and plants; 12-month finding for a petition to list the plant *Lathyrus grimesii* (Grimes vetchling) as endangered in Nevada. Federal Register 60(112): 30826-30827.

Morefield, J. D. 1996. Current knowledge and conservation status of *Lathyrus grimesii* Barneby (Fabaceae), the Grimes vetchling. Carson City: Nevada Natural Heritage Program, status report prepared for the U. S. Fish and Wildlife Service, Reno.
